

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): A heat exchanger for a seawater desalination plant which comprises a titanium alloy material, wherein the titanium alloy material comprises:

a Ti-Al alloy comprising 0.50 - 3.0 mass% of Al, Ti and unavoidable impurities;

an oxide film on the Ti-Al alloy; and

an Al concentration layer between the Ti-Al alloy and the oxide layer,

wherein:

the oxide film has a thickness of 1.0 - 100 nm;

the oxide film comprises 50 mass% or more of a crystalline oxide, the film being produced by a process comprising oxidizing the Ti-Al alloy;

the Al concentration layer has an average Al concentration in a range of from 0.8-6 mass%;

the Al content between the Ti-Al alloy and the oxide layer is 0.8-6 mass%; and

the Al concentration of the Al concentration layer is 0.3 mass% or more higher than an Al concentration of the Ti-Al alloy.

Claim 2 (Previously Presented): The heat exchanger for a seawater desalination plant which comprises the titanium alloy material according to Claim 1, wherein

the unavoidable impurities comprise Fe, Mo, Ni, Nb and Mn; and

the content of each of Fe, Mo, Ni, Nb and Mn in the Ti-Al alloy is

Fe: 0.15 mass% or less,

Mo: less than 0.10 mass%,

Ni: less than 0.20 mass%,

Nb: less than 1.0 mass% and

Mn: less than 1.0 mass%.

Claims 3-6 (Cancelled)

Claim 7 (Previously Presented): The heat exchanger for a seawater desalination plant which comprises the titanium alloy material according to Claim 1, wherein the Al concentration layer has a thickness of 0.10 - 30 μm .

Claim 8 (Previously Presented): The heat exchanger for a seawater desalination plant which comprises the titanium alloy material of Claim 1 in contact with a steel member.

Claim 9 (Previously Presented): The heat exchanger for a seawater desalination plant which comprises the titanium alloy material according to Claim 1, wherein the crystalline oxide comprises Brookite.

Claim 10 (Cancelled).

Claim 11 (Previously Presented): The heat exchanger for a seawater desalination plant which comprises the titanium alloy material according to Claim 1, wherein the Al concentration layer has an average Al concentration in a range of from 3.45-5.92 mass%.

Claim 12 (Previously Presented): The heat exchanger for a seawater desalination plant which comprises the titanium alloy material according to Claim 11, wherein the crystalline oxide comprises Brookite.

Claim 13 (Previously Presented): The heat exchanger for a seawater desalination plant which comprises the titanium alloy material according to Claim 1, wherein the Ti-Al alloy consists of

0.50 - 3.0 mass% of Al, and

a balance of Ti and unavoidable impurities.

Claim 14 (Cancelled).

Claim 15 (Cancelled).

Claim 16 (Previously Presented): The heat exchanger for a seawater desalination plant which comprises the titanium alloy material according to Claim 1, wherein the Ti-Al alloy comprises:

1.0 - 2.5 mass% of Al, and

a balance of Ti and unavoidable impurities.

Claims 17-18 (Cancelled).

Claim 19 (New): A heat exchanger for a seawater desalination plant which comprises a titanium alloy material, wherein the titanium alloy material consists essentially of:

a Ti-Al alloy comprising 0.50 - 3.0 mass% of Al, Ti and unavoidable impurities;

an oxide film on the Ti-Al alloy; and

an Al concentration layer between the Ti-Al alloy and the oxide layer,

wherein:

the oxide film has a thickness of 1.0 - 100 nm;

the oxide film comprises 50 mass% or more of a crystalline oxide, the film being produced by a process comprising oxidizing the Ti-Al alloy;

the Al concentration layer has an average Al concentration in a range of from 0.8-6 mass%;

the Al content between the Ti-Al alloy and the oxide layer is 0.8-6 mass%; and

the Al concentration of the Al concentration layer is 0.3 mass% or more higher than an Al concentration of the Ti-Al alloy.